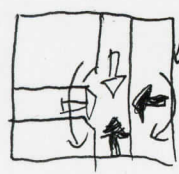


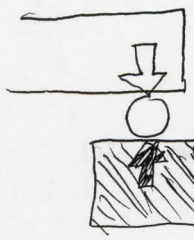
2.30

Point, line, surface use to join the structural

Pinned joints is freely rotation but resist translation in every direction



Rigid joints - provide both force and moment resistance and limited of rotation



Roller joints - useful when a joint allow expansion and contraction of a structural element. Not use in building construction

12.02 Effective structural materials were combine elasticity with stiffness
Elasticity - deform under stress, bend, stretch or compress and maintain its ~~shape~~ original shape when remove stress.

Stiffness - a measure of an elastic body resists deformation. Depends on the shape of structure

Dimensional stability ~~refer to material react~~ change in temperature and moisture content
 Material need to be evaluated before ~~using it~~ using it as a structural member to make sure it don't produce any negative effect like smoke, toxic gas and combustion.

12.03 Life cycle assessment were maintain the material in use, ~~and~~ recycle and reuse available material.

